

## Fumigating with Methyl Bromide means playing it safe

Methyl bromide is an extremely hazardous fumigant, but essential for many phytosanitary treatments on commodities that are destined for export. Do you fumigate raw agricultural products, nursery stock or other commodities with methyl bromide? Do you properly following all label requirements to protect yourself and workers in the fumigation area? If the answer is yes – read on. If you're shaking your head "no" then by all means, read the article twice.

Any person who works with methyl bromide must be knowledgeable about the hazards, and trained in the use of required respirator equipment and detection devices (see below) as well as emergency procedures and proper use of the fumigant. Two persons trained in the use of the product must be present during introduction of the fumigant, initiation of aeration, and after aeration is complete and methyl bromide levels are tested to ensure the safety of other workers. (Only one person is required if monitoring takes place outside of the fumigated area.)

Any time the air concentration level of methyl bromide is above 5 parts per million (ppm) in the fumigation area, applicators and handlers must wear all of the personal protective equipment (PPE) required on the label, including either a self-contained breathing apparatus (SCBA) or a supplied air respirator. The respirator must be a model approved by both the National Institute for Occupational Safety and Health (NIOSH) and the Mine Safety and Health Administration (MSHA). No one without protection is allowed in the area when methyl bromide levels exceed 5 ppm.

Just how do these requirements apply if you are fumigating in a vault, chamber or other sealed-off enclosure within a building? First, any such vault, chamber or other enclosure must be specifically designed and constructed for fumigations. A properly constructed and maintained controlled atmosphere facility may also be sufficient. But converting a standard office or storage room into a chamber rarely is sufficient for conducting safe fumigations.

The Department recommends that all such chamber and vault fumigations and aerations occur when people, except for the protected applicators/handlers, are not present. Even if people are present in the larger building that houses a chamber or vault, an applicator must use a detection device that accurately measures methyl bromide at levels less than 5 ppm.

If you do not measure air concentrations in the larger building, there is no way to know (even with products that contain *chloropicrin*) whether the methyl bromide levels are below 5 ppm. Importantly, if people are present in the building during the actual fumigation or aeration, sufficient safety zones should be established around the chamber or vault. Methyl bromide levels **must be continuously monitored** in areas surrounding the chamber. If at anytime the air concentration, near and around the chamber, exceeds 5 ppm, all unprotected workers must be evacuated immediately. The workers cannot reenter the area until levels are checked building-wide, and methyl bromide measures below 5 ppm. Again, unprotected persons should not enter the safety zone *until* aeration is complete and methyl bromide levels measure below 5 ppm. A fully protected applicator that conducts fumigation and aeration in the absence of people, need not continuously monitor air concentration.

Make sure to follow all other rules and label requirements and that includes proper placarding of the fumigation area, and proper storage of the methyl bromide container. For further information please contact the Pesticide Compliance Office in Olympia, (360) 902-2040.